

Applicants: Ron S. Israeli et al.
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Amendments to the Specification:

Please amend the specification under the provisions of 37 C.F.R. §1.121 (revised amendment format) as indicated below, with deleted matter indicated by strikethrough and added matter indicated by underlining.

Please amend the paragraph running from page 31, line 22 to page 32, line 9 as follows:

-- This invention provides a method to select specific regions on the PSM antigen to generate antibodies. The protein sequence may be determined from the PSM DNA sequence. Amino acid sequences may be analyzed by methods well known to those skilled in the art to determine whether they produce hydrophobic or hydrophilic regions in the proteins which they build. In the case of cell membrane proteins, hydrophobic regions are well known to form the part of the protein that is inserted into the lipid bilayer of the cell membrane, while hydrophilic regions are located on the cell surface, in an aqueous environment. Usually the hydrophilic regions will be more immunogenic than the hydrophobic regions. Therefore the hydrophilic amino acid sequences may be selected and used to generate antibodies specific to mammalian PSM antigen. For an example, hydrophilic sequences of the human PSM antigen shown in the hydrophilicity plot of Figure ~~16~~ 15 may be easily selected. The selected peptides may be prepared using commercially available machines. As an alternative, DNA, such as a cDNA or a fragment thereof, may be cloned and expressed and the resulting polypeptide recovered and used as an

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immunogen. --

On page 53, please amend the paragraph running from lines 20-29 as follows:

-- The gene which encodes the 100kD PSM antigen has been identified. The complete cDNA sequence is shown in Sequence ID #1. Underneath that nucleic acid sequence is the predicted translated amino acid sequence. The total number of the amino acids is 750, ID #2. The hydrophilicity of the predicted protein sequence is shown in Figure ~~16~~ 15. Shown in Figure ~~17~~ 15B are three peptides with the highest point of hydrophilicity. They are: Asp-Glu-Leu-Lys-Ala-Glu (SEQ ID No. 35); Asn-Glu-Asp-Gly-Asn-Glu (SEQ ID No. 36); and Lys-Ser-Pro-Asp-Glu-Gly (SEQ ID No. 37). -

On page 10, please amend the brief description of Figure 15B as follows:

-- B. ~~Prediction of membrane spanning segments~~ Prediction of antigenic determinants --